

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report

Proposed Amended Rule 1309.1 – Priority Reserve

Proposed Rule 1316 – Requirements for Federal Major Modifications

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

BACKGROUND

Rule 1309.1 – Priority Reserve

Current Situation

Proposed Rule 1316 – Requirements for Federal Major Modifications

PROPOSED AMENDMENTS TO RULE 1309.1 – PRIORITY RESERVE

CLARIFICATIONS

Rule 1309.1 – Priority Reserve

Proposed Rule 1316 – Requirements for Federal Major Modifications

CEQA ANALYSIS

SOCIO-ECONOMIC IMPACTS

AQMP AND LEGAL MANDATES

RESOURCE IMPACTS

EXECUTIVE SUMMARY

While new electrical generating Facilities (EGFs) have steadily been coming on-line since 2001, the prospect of electrical power shortages in Southern California and the Basin in particular continues. Factors contributing to potential shortages in the South Coast include increasing power demand, the retirement of some older EGFs and limitations of the power grid system in allowing the transfer of power from northern California to southern California. Siting of approximately 2,500 megawatts (MW) of new electrical power generation has been proposed by utilities in the Basin. At the same time there continues to be a shortage of emission reduction credits (ERCs), specifically SO_x and PM-10 in the open market. Staff proposes that the Rule 1309.1 provisions that authorized EGF's access to the Priority Reserve that expired on December 31, 2003 be re-established with a revised sunset date of December 31, 2008. This amendment would allow, as previously done, EGFs access to the AQMD Priority Reserve account for the purpose of obtaining offsets, after having first established that the required offsets are not reasonably available in the open market, paying a mitigation fee and adhering to certain other requirements of the rule. Rule 1316 establishes equivalency with federal Clean Air requirements for federal major sources.

BACKGROUND

Rule 1309.1 – Priority Reserve

At the October 2001 Public Hearing, Rule 1309.1 – Priority Reserve was amended to allow EGFs temporary access to the Priority Reserve to obtain SO₂, CO and PM-10 credits. California had been experiencing a shortage of electricity for over a year with some Stage 3 shortages (power reserves of less than 1.5%) and rolling blackouts occurring in 2001, and the demand for offsets in the open market exceeded the available supply. The proposed amendments allowed the AQMD to suspend the applicability of Health and Safety Code Section 42314.3 because adequate offsets were being made available at a reasonable price to EGFs. To accommodate EGFs access to the Priority Reserve while maintaining reasonable reserves for other than EGF categories particularly essential public services, credits totaling 750 lb/day of SO₂ and 6,000 lb/day of CO were transferred into the Priority Reserve from the AQMD's New Source Review (NSR) account exclusively for EGF use. The transfer was subject to certain criteria, including paying a non-refundable mitigation fee. Furthermore, the amendments established that the Executive Officer would be able to transfer up to 1,500 lb/day of PM-10 credits into the Priority Reserve from the NSR account after a public meeting. The provisions regarding the transfer and availability of credits to the Priority Reserve for use exclusively

by EGFs expired on December 31, 2003. On December 31, 2003 all credits previously transferred into the Priority Reserve or reserved in the Priority Reserve for exclusive use by EGFs were either transferred or released back to the Districts NSR account.

The California Energy Commission (CEC) permits all power projects rated at or above 50 megawatts. State regulations give sole permitting authority including local land use and environmental regulations to the CEC. The CEC does require that all power projects meet all air quality regulations. For the AQMD, the main regulation affecting the permitting of power projects is New Source Review (Regulations XIII and XX). NSR requires that all projects satisfy Best Available Control Technology (BACT), modeling, offset, and public notice requirements. One potentially problematic area for power projects in the South Coast Air Basin has been and continues to be obtaining adequate offsets.

In accordance with state law, all emission increases from new and modified facilities must be offset. Most facilities with a potential to emit of greater than 4 tons per year of SO_x or PM-10 or 10 tons per year of CO are required to provide external offsets. External offsets are almost always in the form of ERCs. ERCs are created through the shutdowns or over-control of processes. ERCs are only granted for that portion of emissions which exceed current AQMD BACT standards. The ERC generation procedures coupled with the fact that stationary sources are relatively small contributors to the Basin's SO_x, CO, and PM-10 inventory, have been limiting factors in generating significant amounts of ERCs.

Current Situation

In 2005, despite new EGF projects, California once again experienced some Stage 2 shortages (power reserves down to 5%) and the outlook for the foreseeable future is that demand for electrical power will continue to increase. The increase in demand is due to several factors including increased consumption and retirement of older EGFs. There are also limits on the amount of electrical power that can be imported into the southern California region from northern California and Arizona due to bottlenecks in transmission lines. New EGFs are needed in the basin. The proposed amendments once again provide new EGFs access to the Priority Reserve where these proposed projects either do not have or can not secure the needed offsets on the open market.

Proposed Rule 1316 - Requirements for Federal Major Modifications

In December 2002, the United States Environmental Protection Agency (USEPA) adopted amendments to the Clean Air Act modifying NSR requirements for modifications of major sources. Although opposed by the California Air Resources Board (CARB), as well as the AQMD and numerous other local and state agencies, the amendments were mostly upheld upon appeal. Following adoption of the amendment by USEPA, California Senate Bill 288 – Protect California Air Act of 2003 (SB 288) sponsored by State Senator Byron Sher was signed into law by the Governor on September 22, 2003. The bill prohibits local districts, including the AQMD, from amending or revising their NSR rules or regulations to be less stringent than those rules and regulations that existed on December 30, 2002. Rule 1316 will address these two differing state and federal requirements applicable to modifications of major federal sources. USEPA has imposed a deadline of January 1, 2006 for NSR rules to be amended to comply with their requirements.

PROPOSED AMENDMENTS TO RULE 1309.1 – PRIORITY RESERVE

The proposed amendments to the rule scheduled for a Public Hearing in December 2005 are designed to provide access to new EGFs that either do not have or can not secure the needed offsets on the open market. Specifically, the amendments are summarized as follows:

1. The reference to Sulfur Dioxide (SO₂) in the rule is more accurately amended to Sulfur Oxides (SO_x),
2. The transfer of 250 lbs/day of SO_x is authorized, on a one-time basis by January 1, 2006, to the Priority Reserve, for use exclusively by EGFs,
3. The total amount of SO_x credits that may be issued by the Executive Officer to EGFs from the Priority Reserve is limited to 250 lbs/day,
4. The provision requiring the transfer of Carbon Monoxide (CO) into the Priority Reserve account, for use exclusively by EGFs, on a one time basis is eliminated (no requests were previously filed for CO offsets from the Priority Reserve by EGFs and staff does not anticipate any demand for CO Priority Reserve offsets by EGFs for new projects),

5. Requires the return of any unused portion as of December 31, 2008, of the 250 lbs/day, one-time SOx allocation back to the District's NSR account,
6. Clarification that only EGFs that first, are seeking credits and second, submit a complete initial application, for certification to the CEC or permit to construct application are eligible for credits from the Priority Reserve,
7. Qualifying EGFs must have applied or apply for credits from the Priority Reserve during calendar years 2000, 2001, 2002, 2003, and also 2005, 2006 or 2007,
8. EGFs pay a non-refundable mitigation fee assessed based on the amount (for each pound per day) and type (SOx or PM-10) of each pollutant obtained from the Priority Reserve. The proposed mitigation fee for each pound per day of pollutant credit obtained from the Priority Reserve is yet to be determined. In establishing the mitigation fee level, staff is evaluating the most recent market transactions which have ranged from \$28,000/lb per day to \$74,250/lb per day for PM-10 and \$7,600/lb per day to \$18,000/lb per day for SOx. Staff is soliciting feedback from the public on this issue,
9. New EGFs must be fully and legally operational at the rated capacity within 3 years following issuance of a Permit to Construct or initial CEC certification, whichever is later, subject to an extension by the Executive Officer consistent with SCAQMD Rule 205,
10. An aggregate total of 400 pounds per day for PM-10 shall be exclusively reserved for use by essential public services for calendar years 2005, 2006 and 2007, and
11. Deletion of the reference to suspension of Health & Safety Code Section 42314.5 which was repealed January 1, 2004.

CLARIFICATIONS

Proposed Rule 1309.1 – Priority Reserve

The proposed amendments would allow EGFs temporary access to the Priority Reserve for SOx and PM-10 offsets subject to the following requirements:

Making a good faith effort to obtain offsets. The applicant must demonstrate in writing that they have tried to obtain publicly available SOx and PM-10 ERCs including bid proposals; tried to obtain credits from the state emissions bank for such credits; and looked at State Implementation Plan (SIP) approved credit generation mechanisms when available. These efforts would be limited to ERCs and programs that cost less than the proposed mitigation fee. The mitigation fee range per pound per day being considered is as follows:

SOx: \$8,000 - \$20,000

PM-10: \$31,000 - \$82,500

Staff is considering establishing fees based on current market price plus a premium. This fee structure is intended to encourage a good faith effort by EGFs to exhaust other possible ERC sources and limit the use of the Priority Reserve to a bank of last resort.

Submitting a complete application for certification or permit to construct during calendar years 2000, 2001, 2002, 2003, 2005, 2006 or 2007 and becoming operational within three years after permitting. This provision recognizes the narrow window that is available for electrical generating units to become operational and have the greatest and swiftest impact in alleviating shortages in our current energy supply. Power plants take months to years to build, so early permitting is key to meeting future electricity demands.

Paying a non-refundable mitigation fee of \$8,000 to \$20,000 per pound for SOx credits and \$31,000 to \$82,500 per pound for PM-10 credits obtained from the Priority Reserve account. The amount collected from the proposed mitigation fee will be used to fund projects to reduce air pollutants, preferably SOx and PM-10 within the AQMD. The fee is to be non-refundable to discourage frivolous reservations of credits that may adversely impact their availability to other sources in need of credits. It also allows the AQMD to proceed with mitigation projects such that an air quality improvement can be made prior to or concurrent with the start-up of the EGF. Given the relative dearth of available offsets from stationary sources, mobile and area source projects may be likely candidates for funding. Potential projects could include cold ironing of marine vessels at dock, clean diesel and particulate traps on diesel engines, conversion of diesel engines to alternative fuels provided current and future regulatory requirements allow the generation of surplus reductions from such sources. The non-refundable mitigation fee is required to ensure that air quality improvement projects can be identified and developed prior to or as close as practicable to the operation of the EGF. By allowing EGFs to opt out of this fee, an unacceptable level of uncertainty is imposed that would prohibit these monies from being spent and thereby delay air quality improvement.

Meets Best Available Retrofit Control Technology (BARCT) for SO_x and PM-10 at all existing sources. Applicants will be required to reduce SO_x and PM-10 emissions at existing facilities to the lowest level practicable. If available, these retrofits must occur no later than three years from the issuance of a permit to construct or on an earlier schedule approved by the Executive Officer. The three-year time limit recognizes that retrofits may have to occur which could take substantial time to plan, finance, and permit and that peaking units and other electrical generating units can be brought on-line relatively quickly.

The proposed amendments allow EGFs temporary access to the Priority Reserve account for meeting NSR offset requirements for SO_x and PM-10. EGFs will still be subject to all other aspects of NSR including modeling, offsets for volatile organic compounds (VOCs), Regional Clean Air Incentives Market (RECLAIM), and BACT or Lowest Available Emission Rate (LAER). All other applicable AQMD rules and regulations such as toxics and prohibitory rules would continue to apply to EGFs.

The Proposed Amended Rule 1309.1 would allow new or expanding EGFs temporary access to AQMD's Priority Reserve account to offset their SO_x and PM-10 emissions, thereby facilitating their siting. Without additional electrical generation capacity to prevent power curtailments, companies would likely run diesel emergency stand-by generators, which are orders of magnitude more polluting than modern power generators. Because of the scarcity of offsets, it is increasingly difficult to permit new generators. By creating a mechanism to provide offsets for new generators, the need to run diesel stand-by generators may be obviated.

Proposed Rule 1316 – Requirements for Federal Major Modifications

This rule defines, in section (a) ,“Federal Major Modification” as referenced in 40 CFR Section 51.165 and the following specific terms:

1. “reviewing authority” to mean the AQMD,
2. “major stationary source” to mean a stationary source that either emits or has to the potential to emit the amounts specified in SCAQMD Rule 1302(s), and
3. “significant” to mean a rate of emissions equal to or greater than those specified in SCAQMD Rule 1302(r).

Furthermore, the rule establishes, in part (b), the following requirements:

1. That an applicant demonstrating that a proposed modification to an existing stationary source would not constitute a Federal Major Modification, would not be subject to requirements of SCAQMD Rule 1301(b)(5)(A) and SCAQMD Rule 1303(b)(5)(B), and
2. Qualifying facilities filing a Plantwide Applicability Limit (PAL) plan subject to the provisions of SCAQMD Rule 306, and conforming to all PAL provisions specified in 40 CFR Section 51.165 are not subject any other requirements of Rule 1316.

Adopting the Code of Federal Regulations requirements by reference allows a federal major source operator the opportunity to demonstrate that a proposed modification complies with those requirements and thus may not be subject to federal NSR. The modification would, however, be subject to all other applicable requirements of Regulation XIII – New Source Review. In addition, federal major sources may seek compliance through application of a PAL, provided they conform to all PAL provisions in the Code of Federal Regulations. It is expected that this will have limited use in the AQMD since these regulations do not authorize a PAL for ozone or ozone precursors in extreme non-attainment areas.

CEQA ANALYSIS

Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, the AQMD staff is reviewing proposed amended Rule 1309.1 and Proposed Rule 1316 to determine if the proposed amendments would result in any potential adverse environmental impacts. Appropriate CEQA documentation will be prepared based on the analysis.

SOCIO-ECONOMIC IMPACTS

District staff is preparing a socioeconomic impact analysis analyzing the impact of the mitigation fee on EGFs, and will attach it to the adopting Board Letter.

AQMP AND LEGAL MANDATES

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the California Health and Safety Code requires that the AQMD adopt rules and regulations that carry out the objectives of the AQMP. While Proposed Amended Rule 1309.1 is not a control measure included in the AQMP, its requirements are consistent with the AQMP objectives. Furthermore, the AQMD is required to conform with the amendments to the Clean Air Act by January 2006. The rule adoption of Proposed Rule 1316 establishes that conformity.

RESOURCE IMPACTS

The proposed amendments are not anticipated to have a significant impact on staff resources.